

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q63867

Naoto KINJO

Appln. No.: 09/836,287

Group Art Unit: 2675

Confirmation No.: 5456

Examiner: Srilakshmi K. KUMAR

Filed: April 18, 2001

For:

IMAGE DISPLAY APPARATUS AND IMAGE DISPLAY METHOD

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.111

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated December 28, 2004, reconsideration and allowance of the subject application are respectfully requested. Claims 1-31 are presently pending in the application. Applicant respectfully submits that the pending claims define patentable subject matter.

As a preliminary matter, the Examiner is again requested to acknowledge the claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified copy of the priority document.

Claims 1-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ho (U.S. Patent No. 6,064,384) in view of newly cited Howard et al. (U.S. Patent No. 6,222,513; hereafter "Howard"). Applicant respectfully traverses the prior art rejection.

In the Amendment filed July 22, 2004, Applicant argued that claims 1-31 would not have been rendered obvious in view of Ho because the cited reference does not teach or suggest "a

plurality of substantially sheet-like image display mediums bundled and integrated for displaying images ...", as required by independent claim 1, and "bundling and integrating a plurality of substantially sheet-like image display mediums for displaying images ...", as required by independent claim 10. Instead, Ho discloses a *simulation* of display mediums on a single conventional computer screen. That is, in the previous claim rejections based solely on Ho, the Examiner did not address this difference, instead treating the simulated pages as being *actual* display mediums.

In response to the July 22, 2004 Amendment, the Examiner now cites Howard for allegedly disclosing an "electronic sheet display, which can be used with liquid crystal technologies (col. 1, lines 6-10) ... where the electric, gyricon sheet has many characteristics such as being thin and flexible, and where multiple electronic paper sheets can be addressed by a single set of external driving electronics." Further, the Examiner asserts that "[i]t would have been obvious to one of ordinary skill in the art to incorporate the electric sheets of Howard et al into that of Ho as Howard et al disclose in col. 1, lines 6-10 where the electric sheet display may be used with liquid crystal technologies."

Applicant respectfully submits that claims 1-31 would not have been rendered obvious in view Ho and Howard because the cited references do not teach or suggest all of the features of the claims and one of ordinary skill in the art would not have been motivated to modify the computer interface and method of Ho based on the teachings of Howard to produce the claimed invention.

Howard discloses an electric paper sheet that uses a pattern of conductive chargeretaining islands on the outward-facing side of the first of two thin layers used to encapsulate a
Gyricon sheet. The Gyricon sheet and two encapsulating layers form a sheet of Gyricon electric
paper on which images can be written via an external charge-transfer device such as a stylus, a
print head wand or a charge transfer platen. In particular, writing is performed by applying
electric charges to patterned charge-retaining islands of the first encapsulating layer via the
external charge-transfer device. After the charge-transfer device is removed, the conductive,
charge-retaining islands hold the electric charges, creating an electric field in the electric paper
sufficient to cause an image change.

Ho discloses a human-computer interface and method for simulating a book on a computer screen. *See, e.g.,* column 5, lines 50-53; column 6, line 38-40; FIG. 3; column 9, lines 47-56. Information and images are formatted to appear as pages of a simulated book, wherein the "book" display of Ho is a standard computer screen. *See, e.g.,* column 9, lines 47-56; column 17, lines 20-49; and column 16, lines 23-25. Moreover, the entire invention of Ho is the software portrayal of information as a book on the single computer screen, combined with user interfaces to assist a user in browsing. Thus, any modification of Ho in order to meet the requirements of the claims would require a substantial reconstruction of Ho and a redesign of <u>all</u> of the elements, as well as change the basic principles under which Ho was intended to operate. I

¹ If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Similarly, if the proposed modification would render the prior art invention unsatisfactory for its intended purpose, ... (footnote continued)

Further, in the case where the Gyricon sheet taught by Howard is used as a display medium, this substantial display medium corresponds to the computer screen in Ho. Thus, even if the teachings of Howard were applied to Ho, the resulting apparatus would be one to display a virtual display medium (e.g., Fig. 11A of Ho) on the display medium of a Gyricon sheet such that the image forming apparatus of the claimed invention would not be established.

Moreover, Howard does not provide any teaching or suggestion which provides the requisite motivation to modify Ho's computer interface and method since the teachings of Howard are solely directed to writing on a Gyricon sheet using an external charge-transfer device. That is, Howard's teachings are not concerned with or related to display predetermined images such as pages of electronic book. The portions of the "Background" section of Howard (column 1, lines 6-10 and 27-30) cited by the Examiner in support of the rejection merely discuss conventional electric paper sheets (e.g., a Gyricon sheet).

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, there must be some suggestion or motivation to modify or combine the reference teachings. In particular, "[t]o support the conclusion that the claimed invention is directed to obvious subject matter, either references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference." *Ex parte Clapp* 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). However, in the present case, the Examiner has

then there is no suggestion or motivation to make the propose modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

not provided any reasons why one of ordinary skill in the art would have been motivated to modify Ho based on the teachings of Howard. Nor does the Examiner point out any portion of Howard which suggests the desirability of modifying teachings of Ho. The section of Howard (column 1, lines 6-10) cited by the Examiner as allegedly providing the motivation to modify Ho simply states that Howard's "invention is designed for use with Gyricon electric paper but may be used with electric paper based on liquid crystal, electrophoretic and other field-effect display technologies."

Accordingly, Applicant respectfully submits that independent claims 1 and 10, as well as dependent claims 2-9 and 11-31, should be allowable since the cited references do not teach or suggest all of the features of the claims and one of ordinary skill in the art would not have been motivated to combine and modify the cited references to produce the claimed invention.

With regard to dependent claims 4-6, 8, 9 and 12, Applicant argued in the July 22, 2004 Amendment that these dependent claims recite additional features which are not taught or suggested by Ho. However, the Examiner has simply repeated verbatim the reasons in support of the rejections set forth in the April 22, 2004 Office Action without responding to Applicant's arguments for patentability with regard to the dependent claims.

Regarding dependent claims 4 and 12, Ho does not provide any disclosure of utilizing page category information, as described on pages 39 and 40 of the present application. Ho does disclose organizing pages in a "scrap book" and into sections and chapters. *See* Ho column 24, line 57 to column 25, line 17 and FIG. 11B. However, rather than arranging and adjusting images onto image display mediums according to page category information *assigned to the*

image display mediums, Ho's section and chapter arrangement is based entirely upon information in the original files/windows, with no category indicia being assigned to (or otherwise associate with) the virtual pages.

Regarding dependent claim 5, the only data communication device that communicates with an external device or via a communication network identified in Ho is the bus 741 between browsing device 740 and computer input port 730. *See* Ho FIG. 7 and column 21, lines 29-37. Even so, the disclosed browsing-related signals transmitted over this bus do not suggest the transmission of image data, as required in claim 5.

Regarding dependent claim 6, Ho does not teach or suggest adjusting a display output of the display image according to a location environment.

Regarding dependent claims 8 and 9, there is no teaching or suggestion of a lens sheet in Ho.

Accordingly, Applicant again submits that claims 4-6, 8, 9 and 12 recite features which are patentable over Ho. Further, Applicant respectfully submits that it is quite clear that Howard does not make up for the deficiencies of Ho with regard to the features of these dependent claims.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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